

Claims

1. R switch for switching connections between microwave waveguides on and off

- with an essentially parallelepiped stator (2), the four side surfaces of which each have a central opening (3 to 6) for connecting to a microwave waveguide,
- with a rotor (7), which is disposed in the interior of the stator (2) with its axis of rotation coaxial with the longitudinal axis of the stator (2) and which has a centrally disposed straight interconnection (8, 33) and two curved paths (9, 10, 37, 38) on either side thereof,
- the openings (3 to 6) of the straight interconnection (8, 33) and the curved paths (9, 10, 37, 38) being disposed in such a manner that, depending on the rotational position of the rotor (2), each opening (3 to 6) can be connected through over the straight interconnection (8, 33) or over one of the curved paths (9, 10, 37, 38) to each of the other three openings (3 to 6)
- and the straight interconnection (8, 33) being constructed as step transformers (14, 32),

characterized in that the step transformer (14, 32) of the straight interconnection (8, 33) is formed bar-like by recesses (20 to 23, 26 to 29) incorporated in the steps (16 to 19).

2. The R switch of claim 1, characterized in that the step transformer (14) of the straight interconnection (8) is constructed multi-stepped (16 to 19) and that recesses (20 to 23) are incorporated on either side of the last step (17, 18) in the step transformer (14).

3. The R switch of claim 1, characterized in that the step transformer (32) of the straight interconnection (33) is constructed multi-stepped and that recesses (26 to 29) are incorporated on either side of all steps (16 to 19) in the step transformer (32).

4. The R switch of claim 1, characterized in that the step transformer (14) of the straight interconnection (8) is constructed multi-stepped (16 to 19) and that the recesses (22 to 23) are incorporated on one side of the last step (17, 18) in the step transformer (14).

5. The R switch of claim 1, characterized and that the step transformer (32) of the straight interconnection (33) is constructed multi-stepped and that recesses (26 to 29) are incorporated on one side of all steps (16 to 19) in the step transformer 32).

6. The R switch for switching connections between microwave waveguides on and off

- with an essentially parallelepiped stator (2), the four side surfaces of which each have a central opening (3 to 6) for connecting to a microwave waveguide,
- with a rotor (7), which is disposed in the interior of the stator (2) with its axis of rotation coaxial with the longitudinal axis of the stator (2) and which has a centrally disposed straight interconnection (8, 33) and two curved paths (9, 10, 37, 38) on either side thereof,
- the openings (3 to 6) of the straight interconnection (8, 33) and the curved paths (9, 10, 37, 38) being disposed in such a manner that, depending on the rotational position of the rotor (2), each opening (3 to 6) can be connected through over the straight interconnection (8, 33) or over one of

the curved paths (9, 10, 37, 38) to each of the other three openings (3 two 6)

- and the straight interconnection (8, 33) and the curved paths (9, 10, 37, 38) being constructed as step transformers (13, 14, 15, 32),

characterized in that the step transformer (14, 32) of the straight interconnection (8, 33) is constructed multi-stepped (16 to 19) and that recesses (20 to 23) are incorporated on either side of the last step (17, 18) in the step transformer (14).

7. The R switch of claim 6, characterized in that the step transformer (14) of the straight interconnection (8) is constructed multi-stepped (16 to 19) and that recesses (20 to 23) are incorporated on either side of the last step (17, 18) in the step transformer (14).

8. The R switch of claim 6, characterized in that the step transformer (32) of the straight interconnection (33) is constructed multi-stepped and that recesses (26 to 29) are incorporated on either side of all steps (16 to 19) in the step transformer (32).

9. The R switch of claim 6, characterized in that the step transformers (13, 15) of the curved paths (9, 10, 37, 38) are constructed multi-stepped (47 to 50) and that recesses are incorporated on either side of the last step (51 to 54) in the step transformers.

10. The R switch of claim 6, characterized and that the step transformers (13, 15) of the curved paths (9, 10, 37, 38) are constructed multi-stepped (47 to 50) and that recesses are incorporated on either side of all steps (55 to 58) in the step transformers.

11. The R switch of claim 6, characterized in that the step transformer (14) of the straight interconnection (8) is constructed multi-stepped (16 to 19) and that recesses (20 to 23) are incorporated on one side of the last step (17, 18) in the step transformer (14).

12. The R switch of claim 6, characterized in that the step transformer (32) of the straight interconnection (33) is constructed multi-stepped and that recesses (26 to 29) are incorporated on one side of all steps (16 to 19) in the step transformer (32).

13. The R switch of claim 6, characterized in that the step transformers (13, 15) of the curved paths (9, 10, 37, 38) are constructed multi-stepped (47 to 50) and that recesses are incorporated on one side of the last step (51 to 54) in the step transformers.

14. The R switch of claim 6, characterized and that the step transformers (13, 15) of the curved paths (9, 10, 37, 38) are constructed multi-stepped (47 to 50) and that recesses are incorporated on one side of all steps (55 to 58) in the step transformers.